

Figure 5 is a control circuit for the auxiliary power controller of the present invention; and

Please insert the following paragraph after line 18, page 6:

Figure 6 is a block diagram of an alternative embodiment in accordance with the present invention.

Please replace the paragraph beginning at line 5, page 13 with  
the following rewritten paragraph:

In an alternative embodiment the output of PWM 103 may be rectified by other output rectifiers such as a synchronous rectifier (cycloconverter) that provides an ac output signal at a frequency less than or equal to the frequency of the output of PWM 103. Other output circuits, including an inverter 601 (See Figure 6), that provide a welding current may also be used.

In the Claims:

Please cancel claims 1-24 and add the following new claims 25-39.

1                   25.       A welding, cutting or heating power source,  
2                   comprising:  
3                    an input rectifier configured to receive an ac input  
4                   and to provide a first dc signal;  
5                    a converter configured to receive the first dc signal  
6                   and to provide a converter output, and configured to receive  
7                   at least one control input;  
8                    an output circuit configured to receive the converter  
9                   output and to provide a welding, heating or cutting signal;  
10                  and  
11                  a controller, including a power factor correction  
12                  circuit, configured to provide at least one control signal  
13                  to the converter.

1                   26.       The apparatus of claim 25, further including an  
2                  auxiliary power source capable of providing a control power